THOMSON MULTI MEDIA

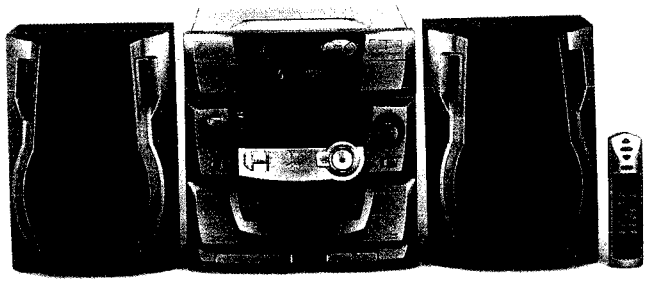
Brandt FERGUSON SABA TELEFUNKEN THOMSON

AUDIO

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

Brandt **AS 4150**

SABA **CS 4160**



Technical data - Caractéristiques principales
Technische Daten - Dati tecnici - Caracteristicas del aparato

Type of set : **Type d'appareil :** **Geräteart :** **Tipo d'apparecchio :** **Tipo de aparato :**	Cassette radio recorder / compact disc Combiné radio cassette / CD CD-Radio Cassetten Portable Insieme radio cassette / CD Radio cassette / CD		280 mm ↕ 295 mm ↗ 340 mm 4,7 kg
Power supply : **Alimentation :** **Stromversorgung :** **Alimentazione :** **Alimentación :**	230 V ~ 50Hz	**Nominal output power :** **Puissance nominale de sortie :** **Nennausgangsleistung :** **potenza nominale di uscita :** **Potencia nominal de salida :**	2 x 1,2 W (rms)
FM - MF : **MW - PO :** **LW - GO :**	87,5 - 108 MHz 522 - 1620 kHz 150 - 283 kHz	**Sensitivity :** **Sensibilité :** **Empfindlichkeit :** **Sensibilità :** **Sensibilidad :**	**FM - MF :** 8µV (S/N = 26 dB) **MW - PO :** 1000 µV/m (S/N = 20 dB) **LW - GO :** 2500 µV/m (S/N = 20 dB)
Frequency response : **Courbe de réponse :** **Frequenzgang :** **Curva di risposta :** **Curva de respuesta :**	125 Hz - 8 kHz (-4 dB)	**Signal to noise ratio :** **Rapport signal / bruit :** **Geräuschspannungsabstand :** **Rapporto segnale / disturbo :** **Relación señal / ruido :**	48 dB
Wow and fluttter : **Fluctuations :** **Gleichlauf :** **Fluttuazioni :** **Fluctuaciones :**	0,35 %	→	4,76 cm/S
		<< ▶▶ >> << ◀◀ >>	C60 : 170 S
Disc rotation speed : **Vitesse de rotation du disque :** **CD-Drehgeschwindigkeit :** **Velocità di rotazione del disco :** **Velocidad de rotación del disco :**	200 · 500 tr/m	**Frequency response :** **Courbe de réponse :** **Frequenzgang :** **Curva di risposta :** **Curva de respuesta :**	100 Hz - 16kHz (±3 dB)
Dynamic range : **Gamme dynamique :** **Dynamikumfang :** **Dinamica :** **Dinámica :**	65 dB	**Signal to noise ratio :** **Rapport signal / bruit :** **Geräuschspannungsabstand :** **Rapporto segnale / disturbo :** **Relación señal / ruido :**	70 dB

DAD

⚠

WARNING : *Before servicing this chassis read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 350 898 70 - 0999 / 3,8M - CRKD 1245 print MALGOGNE/SAILLOUR - AVRILLÉ

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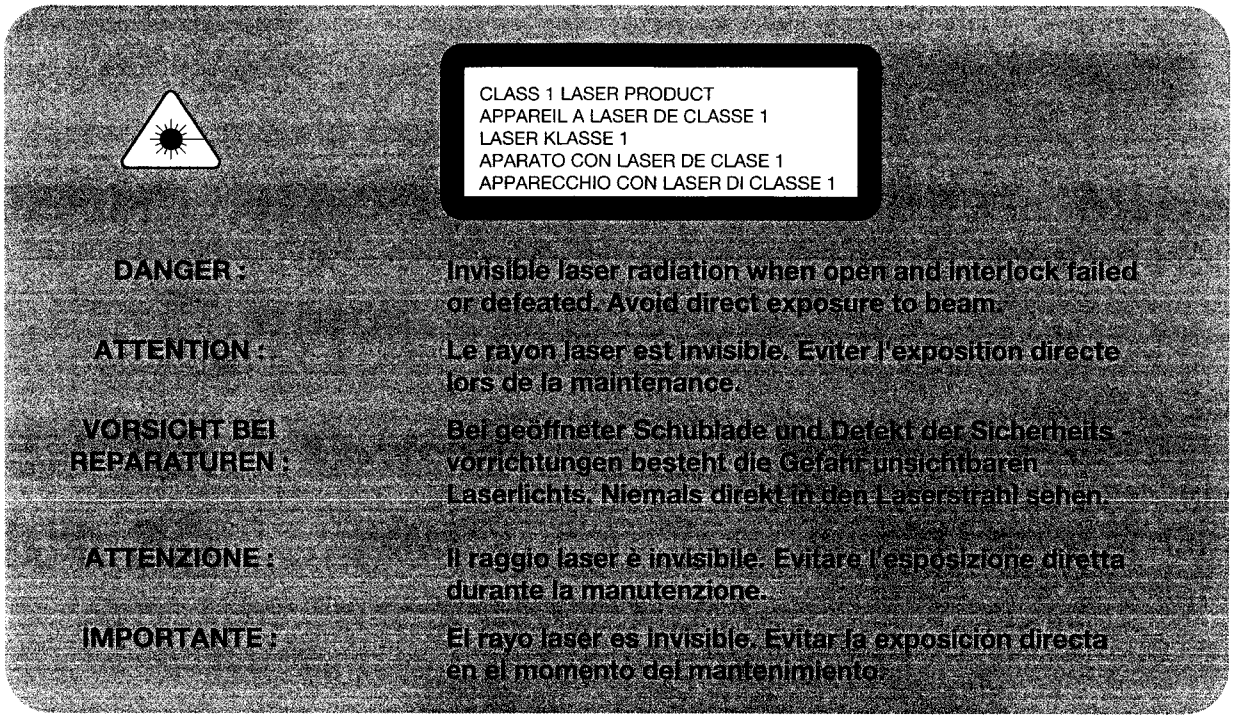
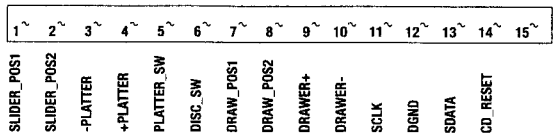

CLASS 1 LASER PRODUCT
APPAREIL A LASER DE CLASSE 1
LASER KLASSE 1
APARATO CON LASER DE CLASE 1
APPARECCHIO CON LASER DI CLASSE 1
DANGER :
Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
ATTENTION :
Le rayon laser est invisible. Eviter l'exposition directe lors de la maintenance.
VORSICHT BEI REPARATUREN :
Bei geöffneter Schublade und Defekt der Sicherheits - vorrichtungen besteht die Gefahr unsichtbaren Laserlichts. Niemals direkt in den Laserstrahl sehen.
ATTENZIONE :
Il raggio laser è invisibile. Evitare l'esposizione diretta durante la manutenzione.
IMPORTANTE :
El rayo laser es invisible. Evitar la exposicion directa en el momento del mantenimiento.

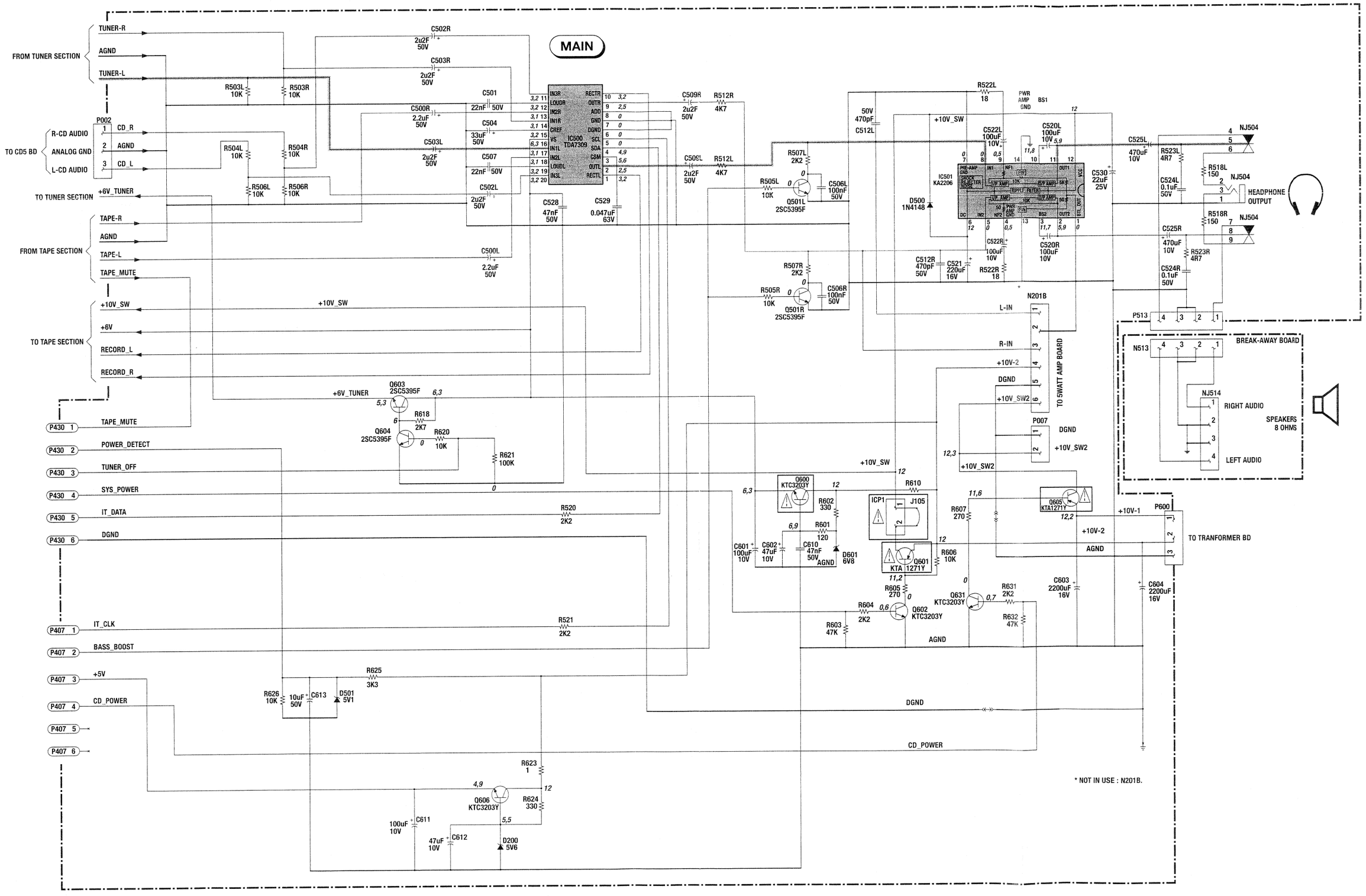
DIGITAL PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT DIGITAL - SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE - ESQUEMA DEL TRATAMIENTO DIGITAL

The complete Digital Processing Module is available from A. S. S. under Part Number :
En SAV, l'ensemble du module traitement digital est géré sous le code :
Die Service Bestell-Nr. für das Modul "Digital Processing kompl." ist :
Il codice del modulo completo di elaborazione digitale è :
En postventa, el modulo completo tratamiento digital lleva el código :

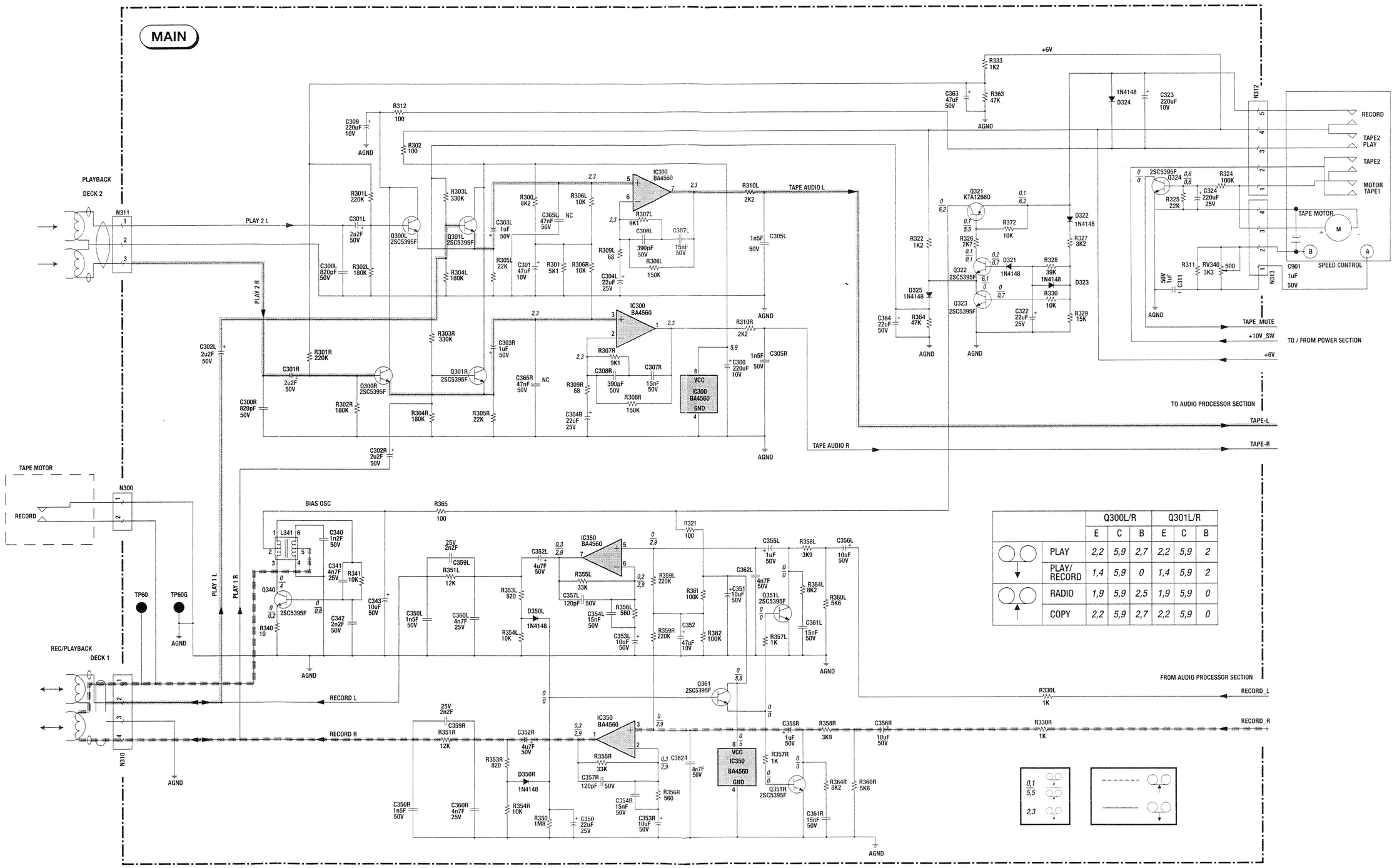
106 389 60



MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL (AUDIO & POWER PART)



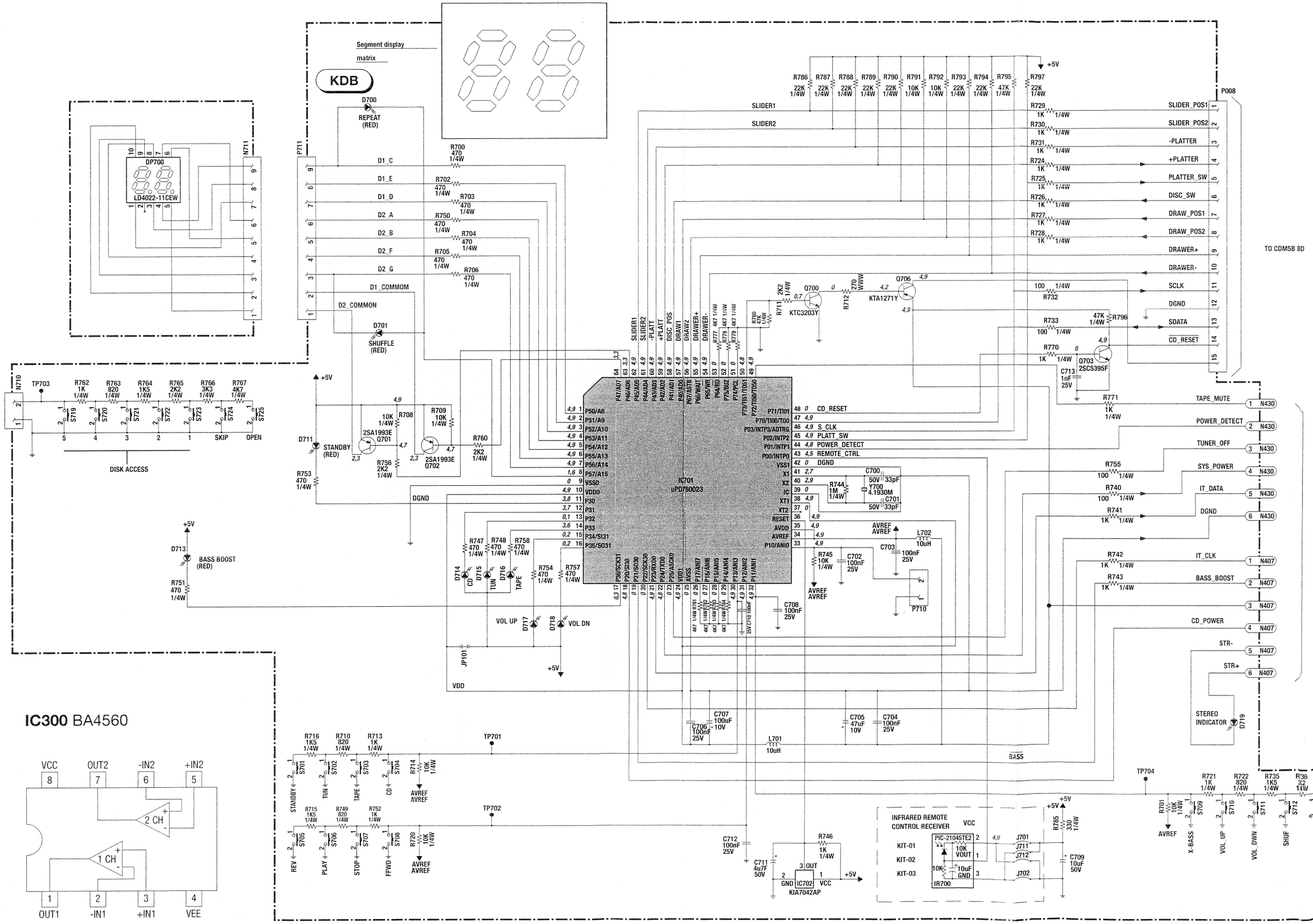
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL (TAPE PART)



		Q300L/R			Q301L/R		
		E	C	B	E	C	B
	PLAY	2,2	5,9	2,7	2,2	5,9	2
	PLAY/ RECORD	1,4	5,9	0	1,4	5,9	2
	RADIO	1,9	5,9	2,5	1,9	5,9	0
	COPY	2,2	5,9	2,7	2,2	5,9	0

CRKD 1245
First issue 09/99

CONTROL / DISPLAY SCHEMATIC DIAGRAM - SCHEMA COMMANDES / AFFICHEUR - BEDIENTEIL / ANZEIGE SCHALTBILD - SCHEMA COMANDI / INDICATORE - ESQUEMA MANDOS / INDICADOR

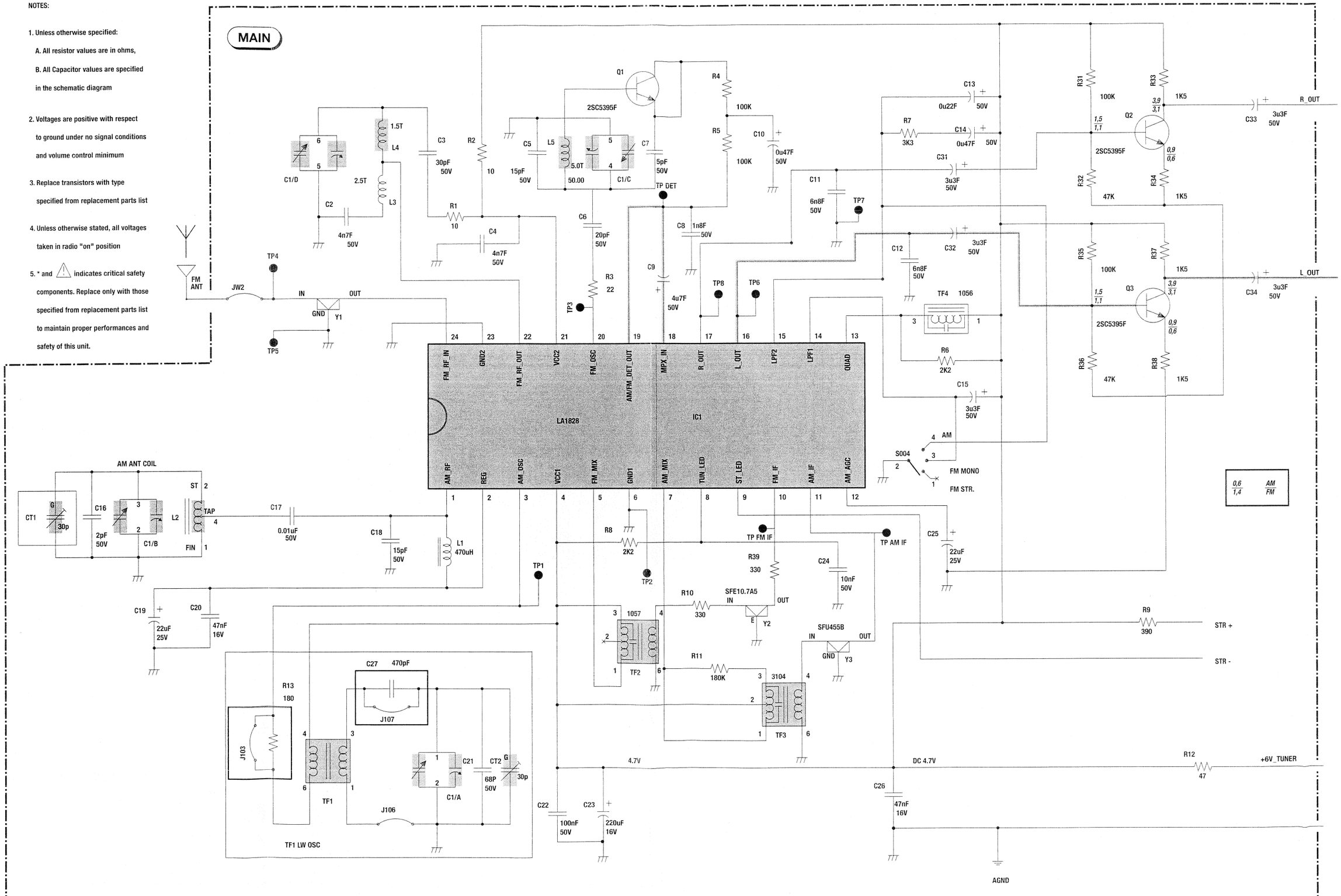


IC300 BA4560

MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL (TUNER PART)

NOTES:

1. Unless otherwise specified:
   A. All resistor values are in ohms,
   B. All Capacitor values are specified in the schematic diagram
2. Voltages are positive with respect to ground under no signal conditions and volume control minimum
3. Replace transistors with type specified from replacement parts list
4. Unless otherwise stated, all voltages taken in radio "on" position
5. * and ⚠ indicates critical safety components. Replace only with those specified from replacement parts list to maintain proper performances and safety of this unit.

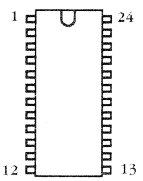


ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

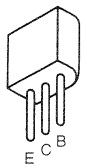
AM alignment						
	Gf or TP		f	18888 KHZ		V
IF	1	IC1 pin 7	455 kHz		TF 3	TP AM IF max.
LW GO	2	Gf	150 kHz	150 kHz	TF 1	TP AM IF max.
	3				L 2	
MW PO	4		1620 kHz	1620 kHz	CT 2	TP AM IF max.
	5				CT 1	

FM alignment						
	Gf or TP		f	18888 KHZ		V
IF	1	Gf IC1 pin 5	10,7 MHz	10,7 MHz	TF 2	TP FM IF max.
	2					TP DET max. symétrie
FM	3	Gf TP4	108 MHz	108 MHz	C1/C	TP FM IF max.
	4				C1/D	
	5		88 MHz	88 MHz	L5	TP FM IF max.
	6				L3/L4	

IC1	FM	AM		FM	AM
1	*1,3*	*1,3*	13	*4*	*4,9*
2	*1,3*	*1,3*	14	*3*	*3,2*
3	*3,7*	*4,9*	15	*3*	*0*
4	*3,7*	*4,9*	16	*1,2*	*1,4*
5	*3,8*	*4,9*	17	*1,2*	*1,3*
6	*0*	*0*	18	*1,2*	*1,2*
7	*3,7*	*4,9*	19	*1,5*	*0,8*
8	*0*	*0*	20	*4*	*4,9*
9	*0*	*3,6*	21	*3,5*	*4,9*
10	*1,3*	*1,3*	22	*3,6*	*4,9*
11	*1,3*	*1,3*	23	*0*	*0*
12	–	–	24	*0*	*0*

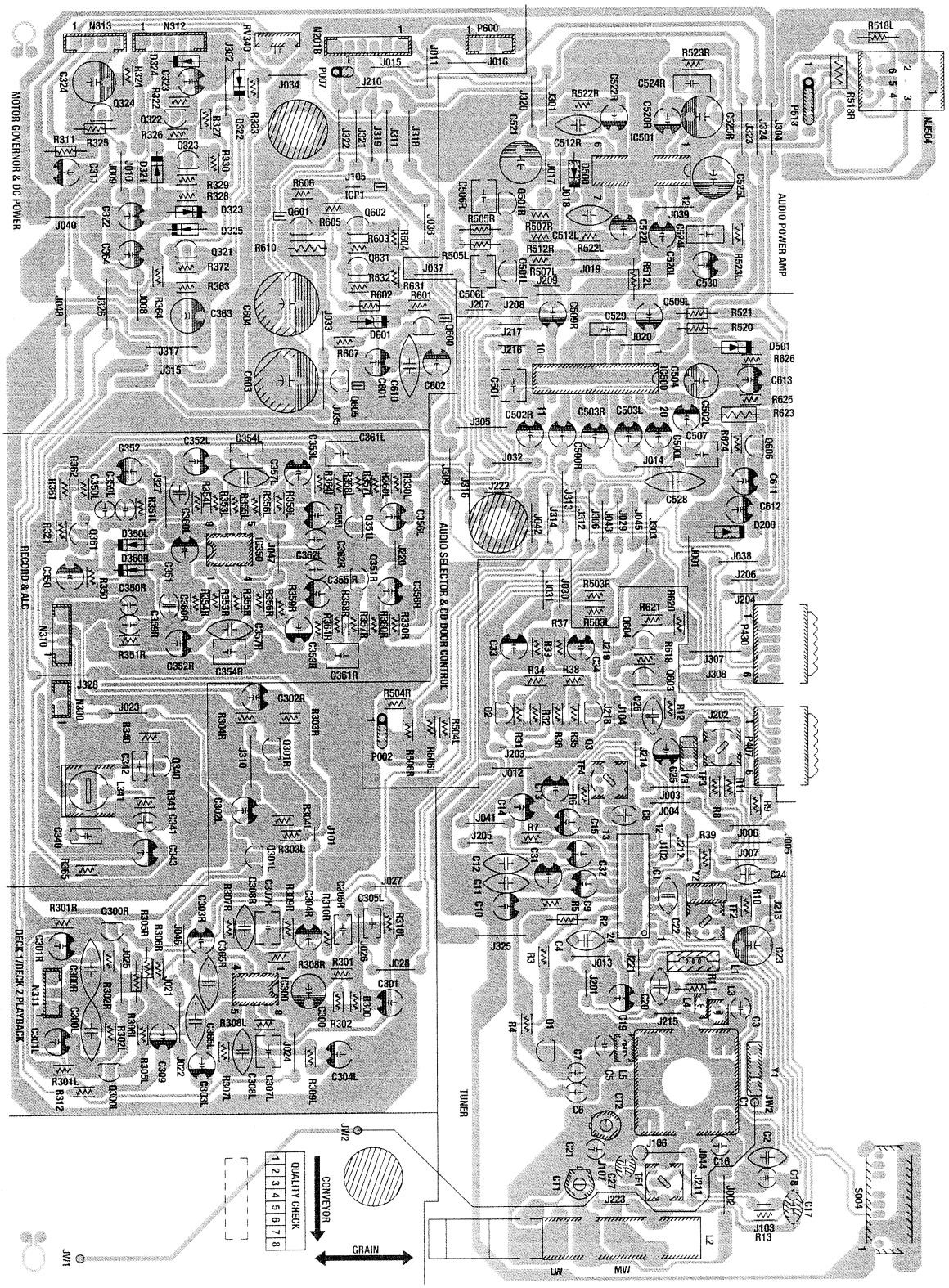


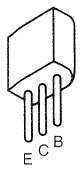
LA 1828



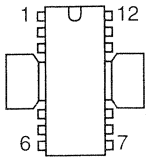
2SC 5395F
2SA 1993E

Main P.C.B.
Platine principale
Hauptplatine
Piastra principale
Platina principal

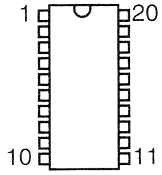




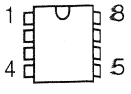
KTA 1271Y
KTC 3203Y



KA 2206



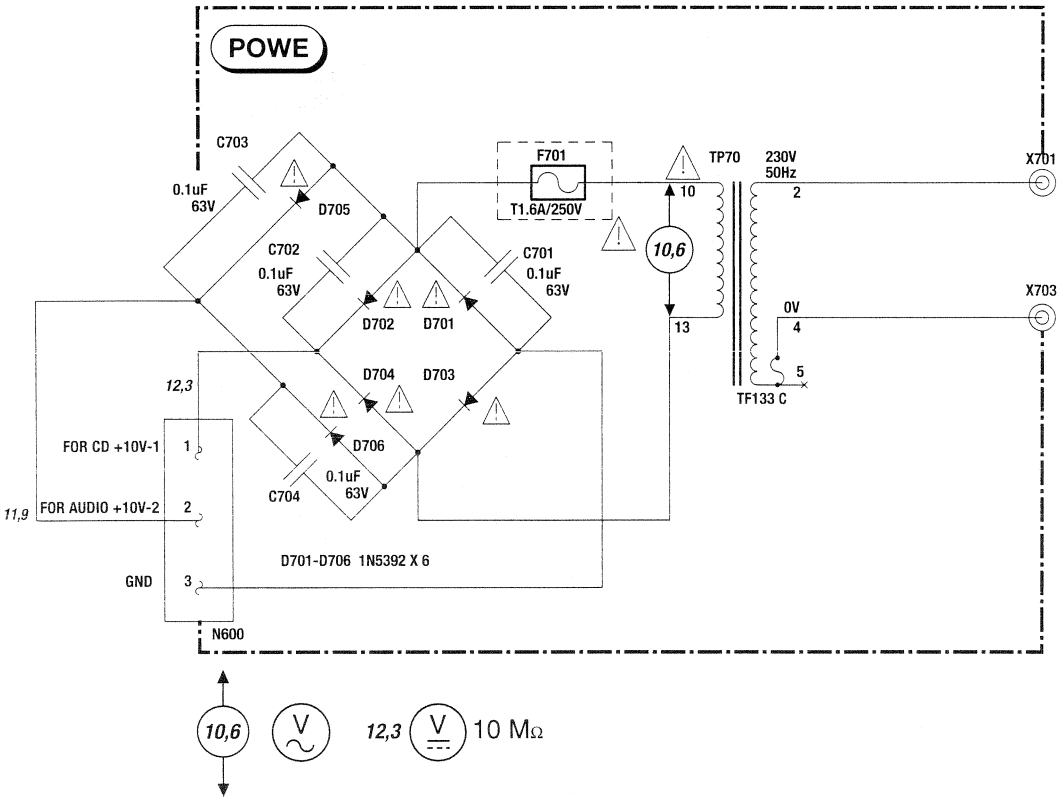
TDA 7309



BA 4560

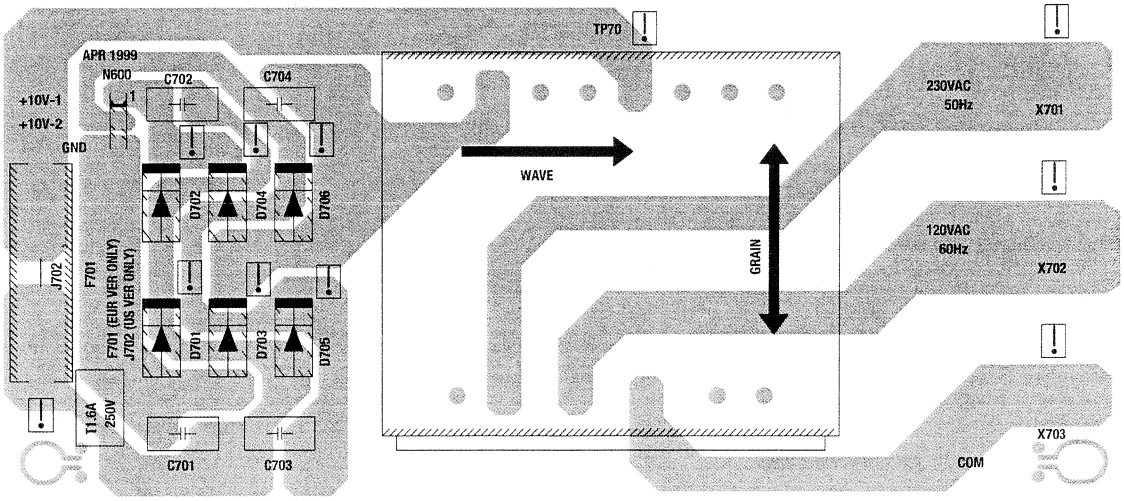
CRKD 1245
First issue 09/99

POWER SUPPLY SCHEMATIC DIAGRAM - SCHEMA DE L'ALIMENTATION - SCHALTBILD NETZTEIL - SCHEMA ALIMENTAZIONE - ESQUEMA DE LA ALIMENTACIÓN

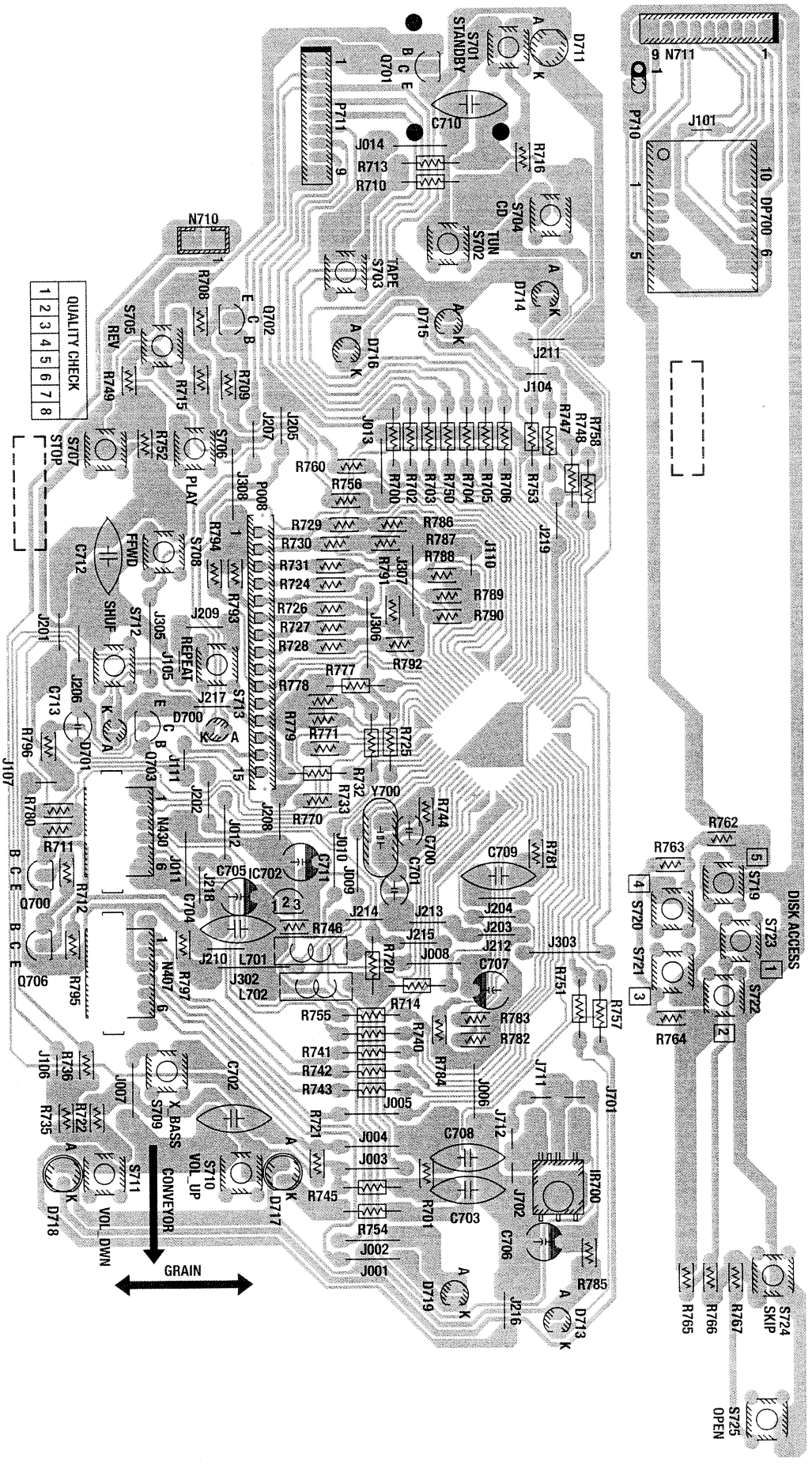


Power supply P.C.B.
Platine alimentation
Ltpl. Netzteil
Piastra alimentazione
Platina alimentación

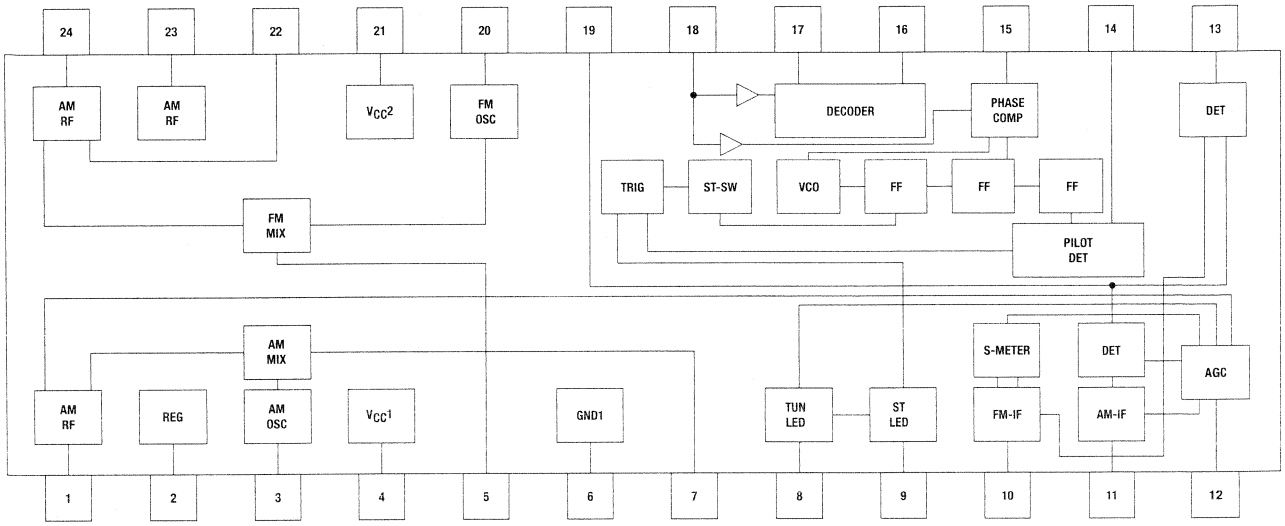
Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes



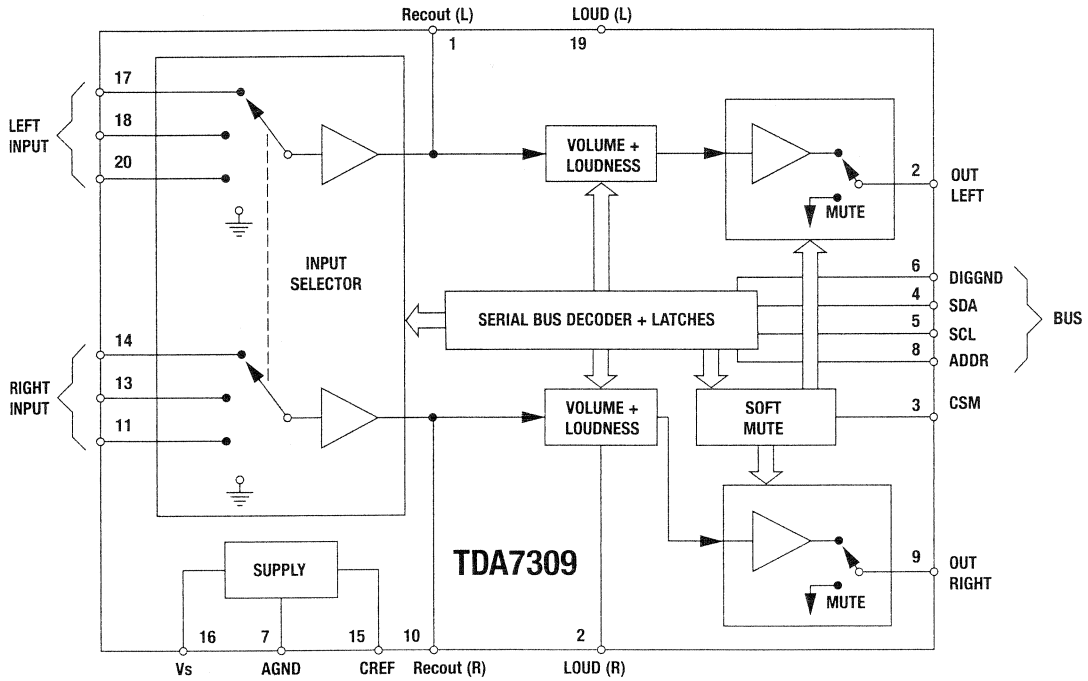
Controls P.C.B.
Platine commandes
Ltpl. Bedienteil
Piastra comandi
Platina de mandos



IC1 LA1828



IC500 TDA7309



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